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| APPLICATION NO.  | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.         | CONFIRMATION NO.       |
|--|-------------|----------------------|-----------------------------|------------------------|
| 10/535,357   | 05/18/2005  | Michael P Doyle      | 31725-77991                 | 3917                   |
| 7590<br>Barnes & Thornburg<br>11 South Meridian Street<br>Indianapolis, IN 46204 |             | 11/20/2007           | EXAMINER<br>WARE, DEBORAH K |                        |
|  |             |                      | ART UNIT<br>1651            | PAPER NUMBER           |
|  |             |                      | MAIL DATE<br>11/20/2007     | DELIVERY MODE<br>PAPER |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

|                              |                        |                                  |
|------------------------------|------------------------|----------------------------------|
| <b>Office Action Summary</b> | <b>Application No.</b> | <b>Applicant(s)</b>              |
|                              | 10/535,357<br>D. Ware  | Doyle et al.<br>Art Unit<br>1651 |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 27 August 2007.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above claim(s) 9-35 is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-8 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) Notice of References Cited (PTO-892)                    4) Interview Summary (PTO-413)  
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)                    Paper No(s)/Mail Date. \_\_\_\_\_  
3) Information Disclosure Statement(s) (PTO/SB/08)                    5) Notice of Informal Patent Application  
Paper No(s)/Mail Date \_\_\_\_\_                    6) Other: \_\_\_\_\_

**DETAILED ACTION**

Claims 1-35 are pending.

***Election/Restrictions***

Applicant's election of Group I, claims 1-8, in the reply filed on August 27, 2007, is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Claims 9-35 are hereby withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected inventions, there being no allowable generic or linking claim. Election was made without traverse in the reply filed on August 27, 2007.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

***Information Disclosure Statement***

The information disclosure statements (IDSs) submitted on March 9, 2006, and May 18, 2005, were received and entered. The submissions are in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statements are being considered by the examiner.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claim 1 is rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Daeschel et al (US 5451369, cited on enclosed PTO-892 Form).

Claim 1 is drawn to method of treating a surface of a food processing facility wherein the surface has microorganisms disposed thereon comprising disposing a

biofilm containing a second microorganism population and inhibiting the microorganisms of the first population disposed on the surface with the second microorganism population.

Daeschel et al teach method of treating a surface of a food processing facility wherein the surface has microorganisms disposed thereon comprising disposing a biofilm containing a second microorganism population (note column column 5, lines 60-65) and inhibiting the microorganisms of the first population disposed on the surface with the second microorganism population. Also note column 1, lines 1-25 and column 2, lines 10-14.

The claim is identical to the cited disclosure and is, therefore, considered to be anticipated by the teachings therein. A first population and second population of microorganisms are considered to be inherent to the cited disclosure because two separate types of microorganisms are required in order for the disclosed invention to work since the biofilm is disclosed to inhibit and treat the surface and the food processing facility is disclosed to contain on their surface harmful bacteria. However, in the alternative that there is some difference between claim 1 and the cited disclosure due to some unidentified claim characteristic, then the difference is considered to be so slight as to render the claim obvious over the cited Daeschel et al patent.

#### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 2-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Daeschel et al (US 5451369, cited on enclosed PTO-892 Form) in view of Sulzer et al (AT, cited on enclosed PTO-1449 Form) and DeLoach et al (US 5308615, cited on enclosed PTO-892 Form).

Claims are further drawn to Listeria monocytogenes as the first population of microbes which are on the surface of the facility and the second population includes genus and species from Enterococcus durans, Lactococcus lactis and Lactobacillus plantarum.

Daeschel et al teach method of treating a surface of a food processing facility wherein the surface has microorganisms disposed thereon comprising disposing a biofilm containing a second microorganism population (note column column 5, lines 60-65) and inhibiting the microorganisms of the first population disposed on the surface with the second microorganism population. Also note column 1, lines 1-25 and column

2, lines 10-14. Further, Lactobacillus plantarum is disclosed, note column 3, lines 55-65 and column 4, lines 30-32 and column 6, line 37. Also Lactococcus lactis is disclosed at column 4, line 31.

Sulzer et al teach growth inhibition of Listeria monocytogenes population by Enterococcus, Lactobacillus and/or Lactococcus species populations. Note the abstract and Table II, all lines at page 290.

DeLoach et al teach Enterococcus durans, note column 3, lines 49-50 which has pathogenic activity against another population of microorganisms. Also note the abstract.

The claims differ from Daeschel et al in that the pathogenic first population of Listeria monocytogenes and specific species of Enterococcus durans is not disclosed.

It would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to inhibit a first population of microbes on a kitchen surface with a biofilm comprising a second population of microbes as disclosed by Daeschel et al wherein the first population can be Listeria monocytogenes as disclosed by Sulzer et al and the biofilm containing a second population of Enterococcus durans as disclosed by DeLoach et al. One of skill would have expected successful results with any of these species well known in the art to have inhibitory activity against food processing facility pathogenic bacteria. Listeria monocytogenes is well recognized as a pathogen and to inhibit it using a biofilm is clearly an obvious modification of the cited prior art.

Each of the claim features are disclosed by the cited prior art and one of skill would have been motivated to use a biofilm for a method of treating a surface of a food

processing facility. Clearly the claims are *prima facie* obvious because each of the claims are disclosed to be successful in the prior art and biofilms are clearly disclosed by the cited primary reference. To select for distinct microbes for a first and second population as claimed is well within the purview of an ordinary artisan because each are well known for their roles in the food processing facility environment and one of skill would have expected successful results. One of skill would have been motivated to select a biofilm as it is clearly taught by the cited prior art. The claims are rendered *prima facie* obvious over the cited prior art.

All claims fail to be patentably distinguishable over the state of the art discussed above and cited on the enclosed PTO-892 and/or PTO-1449. Therefore, the claims are properly rejected.

The remaining references listed on the enclosed PTO-892 and/or PTO-1449 are cited to further show the state of the art.

No claims are allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Deborah K. Ware whose telephone number is 571-272-0924. The examiner can normally be reached on 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mike Wityshyn can be reached on 571-272-0926. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

*Deborah K. Ware*  
**DEBORAH K. WARE**  
**PATENT EXAMINER**  
Deborah K. Ware  
November 10, 2007